DAMSELFLY EGGLAYING HABITS

DAMSELFLY EGGLAYING HABITS: AGRION SPLENDENS (HARRIS)

By CHARLES F. COWAN*

Males of many damselfly species participate in egglaying, either as the passive partners of tandem pairs; each standing erect gripping the neck of the submerging female with his anal claspers, legs folded in a "look, no hands" attitude and sometimes being dragged under the surface by his mate; or else waiting nearby until she has finished her work. Some books suggest that the former posture is "ready for a quick takeoff", but that I doubt. The threat would be aerial, by bird or dragonfly, or submarine by fish. Either way, the male would be incapable of sufficient acceleration for the pair to escape. More likely he is standing, first as a sentry to watch for any submarine danger and withdraw before emergency arises, or in an aerial attack to fall as sacrifice and allow his mate to carry on. Of some other species, however, it is said that the female "oviposits unattended by the male". One such is *Agrion splendens* (Harris), but I believe that this male is equally responsible.

Lessonhall is a small village in northwest Cumbria (NY 2250, sheet 85) from which the River Waver runs northwest for about a mile in a deep cut between a byroad screened by a tall hedge and a farmtrack, before wending its way past Abbey Town to the Solway Firth. I was attracted to this cut in spring, 1960, when I happened on it, resplendent with wildflowers, notably Cardamine pratensis and Hesperis matronalis (white rocket), and alive with Anthocharis (orange tips). Revisiting it hurriedly on 25th June, I discovered a strong colony of Agrion splendens there, and settled down to photograph them. Unfortunately I was too late to see courtship, but I adopted a pair which soon selected a spot and uncoupled. The female stood on a floating stem, and submerged, and the male stood above her on the same stem. I snapped them in succession on the stem, and although one could still see the female submerged below the male, she does not show in the photo of him. Nearby pairs appeared to follow the same procedure. Eventually there were just the few males visible, the females all hidden below. Rudely, in the interest of science, I disturbed my male, who moved away about a foot. Again, more roughly, I threatened him. He obstinately flew to the nearest reed, still close to, and in full view of, the female. Time pressed; I watched for fifteen minutes, then had to go, leaving them in their respective positions. Nothing will convince me that those males were not "in attendance".

Egglaying procedure in Odonata seems to follow a more or less set pattern for each genus. The other British Agrion is A. virgo (L.), *4 Thornfield Terrace, Grange over Sands, Cumbria, LA11 7DR. whose beautiful dark green males are such a familiar sight in favoured areas. How often are they to be seen sitting around on foliage overlooking a stream, apparently doing nothing? Are they not often, in fact, watching over their invisible mates? One forenoon in the New Forest I walked along a stream and saw them, perhaps five or six males to the mile. Returning in the evening, none were visible. Instead, I found neat little groups of the four severed wings, in the grass at regular intervals. Had those males each become meals for predators, diverting attention from their egglaying mates and sacrificed for the benefit of the species?

I have used the name Agrion, but notice that in the last 3 or 4 years that name has suddenly been dropped from the British List without explanation. Agrion Fabricius, 1775 (: 425) is far the most senior generic name in Zygoptera. Under it, Fabricius included just two species, Libellula virgo L. and L. puella L., both composites as indeed they were for Linnaeus. Its seniority ensures that it must be valid, and employed for the genus containing whichever of the two species was first validly designated its type species. As both species are British, so inevitably must be Agrion.

Alas, in about 1963 the Lessonhall section of the River Waver was "cleaned up". All the flora, including those in the river bed, were cleared; and June visits in 1965 and 1985 found no damselflies.

Reference

Fabricius, J. C. 1775. Systema Entomologiae etc. [32] + 832 pp. Flensburgi et Lipsiae.

RHEUMAPTERA UNDULATA L. (LEP.: GEOMETRIDAE) IN. N. W. KENT. — Two females in very good condition were found in my garden m.v. trap on the night of July 14th, 1987. There are very few recordings for N. W. Kent, and these all in the second half of the last century, the most recent being in 1882 for the famous Birch Wood which was the southerly extension of the woodland in the immediate vicinity of my home (J. Chalmers-Hunt, *Butterflies* and Moth of Kent, 1981). Although the local woodland would seem to provide a suitable habitat, being on a clay soil and possessing numerous rides bordered by sallows, the nights of July 14th and 15th were marked by the capture of immigrant moths in widely scattered parts of Britain, and the meteorological conditions may have encouraged dispersal of some native species. I am inclined to believe that these specimens were not of local origin. — B. K. WEST, 36 Briar Road, Dartford, Kent.

252